SITARZ, M.

SITAFZ, M. How to install grounding and zero-phase sequence. p. 83

Vol. 8, no. 3, Mar 1956
PRZEGIAD KOLEJCHY ELEKTROTECHNICZNY
TECHNOLOGY
Warszawa, Foland

So: East European Accession Vol. 6, no. 2, 1957

SITARZ, K.

Control and measurement of vagrant current.

p. 145 (Przeglad Kolejowy Elektrotechniczny. Vol. 8, no. 5, May 1956. Warszawa, Poland)

Monthly Index of East European Accessions (EEAI) IC. V_01 . 7, no. 2, February 1958

KRYCHNIAK, Stefan, mgr inz.; SITARZ, Marian, inz.

The SW-type magnetic contactors for electric heating installations of cars of the Folish Railroads. Przegl kolej elektrotech 14 no.8:225-229 Ag '62.

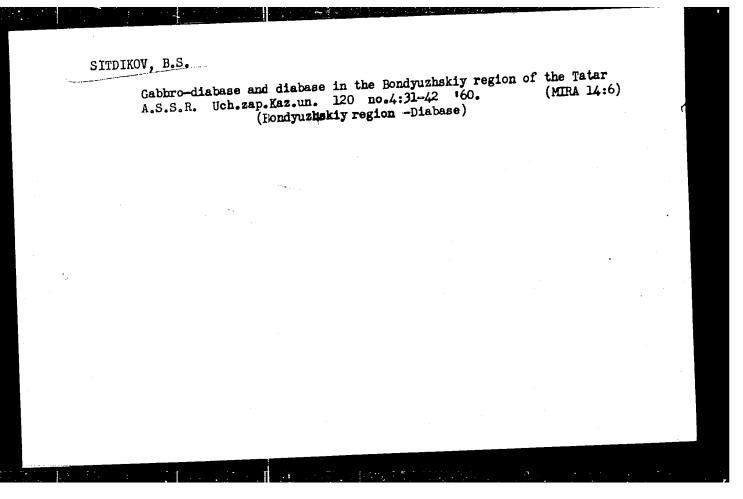
CHURA, A.J.; SIKULA, L.; SITAY, S.; PRONAY, K.

Effect of aureomycin in acute rheumatism in children. Lek. listy, Brno 6 no.21:648-654 contd. 1 Nov 51. (CIML 21:4)

SITCHIKHIN, V.; OSIS, Z.; MARKHEL, I., red.; GRANT.V.[Grants, V.], tekhn. red.

[The seven-year plan of Latvia in operation] Semiletka Latvii v deistvii. Riga, Latviiskoe gos. izd-vo, 1963. 73 p. (MIRA 16:8)

(Latvia--Economic policy)



ELLERN, S.S.; SITDIKOV, 3.S.

Age and mode of occurrence of gabbro norites in Tatarstan and adjacent areas. Izv. AN SSSR. Ser.geol. 27 no.9:96-101 S (MIRA 15:9)

1. Kazanskiy gosudarstvennyy universitet.
(Russian Platform--Hyperite)

ELLERN, S.S.; PEN'KOV, I.N.; SITDIKOV, B.S.; VALEYEV, R.N.; MATYAYEVA, K.I.

1.0

Association of hydrothermal carbonate, bitumen, and sulfides in the Devonian of the northern part of the Kazan-Kirovo trough. Dokl.AN SSSR 145 no.5:1123-1126 '62. (MIRA 15:8)

l. Kazanskiy gosudarstvennyy universitet im. V.I.Ul'yanova-Lenina.
Predstavleno akademikom N.M.Strakhovym.
(Kirov Province--Petrology)

GORBACHEV, B.F.; SITDIKOV, B.S.; VLASOV, V.V.

Weathering crust on the crystalline rocks of the base of the northeastern part of the Tatar A.S.S.R. Dokl. AN SSSR 146 no.1:195-198 S 162. (MIRA 15:9)

l. Kazanskiy gosudarstvennyy universitet im. V.I. Ul'yarova-Lenina i Kazanskiy filial AN SSCR. Predstavleno akademikom N.M. Strakhovym.

(Tatar A.S.S.R.--Petrology)

ELLERN, S.S.; VALEYEV, F.N.; SITDIKOV, B.S.

Some characteristics of the distribution of Devenian volcanic formations in the eastern part of the Russian Platform. Sov.gool. 6 no.8:66-77 Ag 163. (MIRA 16:9)

1. Kazanskiy gesudarstvenyy universitet.
(Russian Platform—Geelegy, Structural)

VALEYEV, R.N.; SITDIKOV, B.S.

Geology of the crystalline bedrock in the Vyatka-Kama interfluve.

Dokl. AN SSSR 1.52 no.6:1416-1419 0 '63. (MIRA 16:11)

1. Kazanskiy filial AN SSSR i Kazanskiy gosudarstvennyy universitet im. V.I. Ul'yanova-Lenina. Predstavleno akademikom D.I. Shcherbakovym.

SITDIKOV, B.S.; BORONIN, V.P.

New data on the structure of the basement and the interpretation of geophysical anomalies in the western part of the Tatar A.S.S.R. Dokl. AN SSSR 153 no.1:176-179 N *163. (MIRA 17:1)

1. Kazanskiy gosudarstvennyy universitet im. V.I. Ul'yanova-Lenina. Predstavleno akademikom A.A. Trofimukom.

CORBACHEV, B.F.; V.AYOV, V.V., SITDIKOV, B.S.

Obstantistics of the formation of authigenous anatase in the katagenesis zone. Lit. i pol. iskop. no.5:105-108 S-0 '64.

1. Kazanskiy gogudaratvempyy universitet.

(MIRA 17:11)

Sitdikova, F. N. 5(3) AUTHORS: Pudovik, A. N.,

sov/20-125-4-38/74

TITLE:

Addition of the Incomplete Esters of Phosphoric Acids to Nitroisoamylene and Ethyl-vinylsulfone (Prisoyedineniye nepolnykh efirov kislot fosfora k nitroizoamilenu i etil-

vinilsul fonu)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 4, pp 826-828

ABSTRACT:

The authors continue their work (Ref) in the field of the addition of esters of various phosphorus containing acids etc to other compounds. It was of interest to extend the field of application of the mentioned reactions to the unsaturated nitro compounds and unsaturated nitrosulfones. This would facilitate a simple and convenient method of synthesis of nitrophosphinic - and sulfophosphinic esters which normally is either difficult or impossible (Refs 2-4). The catalysts were alcoholates of alkali metals without solvent. It was very easy to add dimethyl- and diethyl phosphoric acid to nitroisoamylene. In this connection a considerable amount of heat was produced. The reaction products are weakly smelling distillable liquids of a slightly yellow color. The addition of the ethyl ester of phosphono acetic acid to nitroisoamylene

card : 1/3

Addition of the Incomplete Esters of Phosphoric Acids to Nitroiscamylene and Ethyl-vinylsulfone

is more difficult. It requires considerable amounts of alcoholate and temperatures of $100-110^{\circ}$ during several hours. A rather long induction period precedes the reaction. Table 1 shows the constants of the products obtained. Nitroiscamylene polymerizes only weakly in this connection. The experiments dealing with the addition of diethyl- and dimethyl thiophosphorus acid to furyl nitroethylene and ω -nitrostyrene in the presence of alcoholates of alkali metals as well as in the presence of organic bases, further the carrying out of the reaction in solutions in all cases led to a more rapid polymerization than it was the case with the addition reaction, in spite of the use of catalysts milder(piperidine and triethylamine) than alcoholates. It was not possible to isolate the addition products, and after a several hours heating at 80-90° only the initial products were isolated. It is wellknown that certain nucleophilic reagents easily add to the double bond of unsaturated sulfones, in which connection various derivatives of saturated sulfones form. The addition products are distillable liquids or crystalline colorless substances, with a weak smell (Table 2). The reactions described

Card 2/3

Addition of the Incomplete Esters of Phosphoric Acids to Nitroisoamylene SOV/20-125-4-38/74

> in the present paper were carried out according to the method of reference 1. The reagents were used in equimolar amounts (1/20 - 1/30 mole). Thus, it was proved that the dialkyl phosphorous - and dialkyl thiophosphorous acids as well as the acid esters of alkylphosphinic acids in the presence of an alkali catalyst are capable of adding to the double bond of the α -unsaturated nitro compounds and sulfones. There are 2 tables and 4 references, 3 of which are Soviet.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina

(Kazan' State University imeni V. I. Ul'yanov-Lenin)

PRESENTED: December 19, 1958, by B. A. Arbuzov, Academician

SUBMITTED: November 28, 1958

Card 3/3

SITDIKOVA, R.G. Roentgenological observations on the course and results of therapy of a pulmonary cyst. Sov. med. 23 no.3:77-78 hr '59. (MIRA 12:4) 1. Iz rentgenovskogo kabineta sanatoriya "Vasil'yevo" (glavnyy vrach V.A. Ponomarev). (IDNGS, cysts, z-ray follow-up (hus))

SITDYKOV, E.N.

Case of prolapse of a ureterocele through the orificium urethrae externum. Kaz. med. zhur. no.1:80-81 Ja-F 61 (MIPA 16:11)

1. Fakul'tetskaya khirurgicheskaya klinika im. A.V.Vishnevskogo (Zav.-prof. S.M. Alekseyev [deceased]) Kazanskogo med. instituta na baze Respublikanskoy klinicheskoy bol'nitsy (glavvrach - Sh. V. Bikchurin).

SITDYKOV, E.N.

Suprepublic transvesical adenomectomy with a blind suture in the bladder by the Gel'fer-Blatnoi technic. Kaz. med. zhur. no.1:9-11 Ja-F '62. (MIRA 15:3)

l. Kafedra fakul'tetskoy khirurgii (zav. - prof. I.F. Kharitonov) Kazanskogo meditsinskogo instituta, na baze Respublikanskoy klinicheskoy bol'nitsy (glavnyy vrach - K.L. Svechnikov).

(PROSTATE GLAND—SURGERY)

A section of the C_{ij}^{2} and so that the C_{ij}^{2} is the probability of C_{ij}^{2} in C_{ij}^{2} . The C_{ij}^{2} is C_{ij}^{2} in $C_{ij}^{$

SITDYKOV, E.N.

Diagnostic significance of the determination of sialic acid and protein fractions in the blood serum in prostatic adenoma and pyelonephritis. Kaz.med.zhur. no.4:33-34 Jl-Ag '62. (MIRA 15:8)

1. Fakul'tetskaya khirurgicheskaya klinika (zav. - prof. I.V. Kharitonov) Kazanskogo meditsinskogo instituta na baze Respuclikanskoy klinicheskoy bol'nitsy (galvnyy vrach - K.L.Svechnikov). (NEURAMINIC ACID) (BLOOD PROTEINS) (PROSTATE GLAND-TUMORS) (KIDNEYS--DISEASES)

BOLDIN, K.M. (Yaroslavl'); DROZDOVA, Z.S.; LEVIN, R.I.; VAYSMAN, L.A. (Kuybyshev-obl.); PODOSINOVSKIY, V.V.(Kazan'); SAYFULLINA, Kh.M. (Kazan'); EUSYGIN, N.V.(Kazan'); RAZUM-VSKIY, Yu.K.(Leninogrosk); GEL'FER, G.A., dotsent (Gor'kiy); MAMISH, M.G.(Kazan'); RAFALOVICH, M.B., dotsent; MEL'NICHUK, S.P., kand.med'nauk; KRAPIVIN, B.V.; STAROVEROV, A.T. (Saratov); SURIN, V.M.; POROSENKOV, V.S.(Romodanovo, Mordovskoy ASSR); ANDROSOV, M.D.(Moskva); ZARIPOV, Z.A.(Urussu, Tatarskoy ASSR); MURAV'YEV, M.F.(Izhevsk); KUZ'MIN, V.I.(Batyrevo, Chuvashskoy ASSR); SITDYKOV, E.N.(Kazan'); YUDIN, Ya.B.(Novokuznetsk)

Short reports. Kaz.med.zhur. no.4:81-91 J1-Ag '62. (MIRA 15:8) (MEDICINE--ABSTRACTS)

AYDAROV, A.A., kand.med.nauk (Kazan'); SITDYKOV, E.N. (Kazan')

Fourth All-Union Conference of Urologists (June 24-30, 1961, Moscow).

Kaz.med.zhur. no.4:109-111 J1-Ag '62.

(UROLOGY--CONGRESSES)

(UROLOGY--CONGRESSES)

Frimary blind suture of the bladder in supratuble adendmentary as a method of choice. Kaz. med. wher. no.6:32-36 N-D '63.

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. I.F. Kharitonov) Kazanskogo medit.sinskogo instituta, na baze Kazanskoy respublikanskoy bol'nitsy (glavnyy vrach - K.L. Svechnikov).

SITEYRON, E.R.

Local novocairs onesthesia in operations on the organs of the small polyte. Neucl. trudy Kar. gos. med. inst. 14:545-546 (Mira 18:9)

1. Kafeera fakuittetakoy khirergii (zav. - prof. I.P.Kharitonov)

Kazanskogo meditsisskogo instituta.

HUNGARY

CSERNOHORSZKY, Vilmos, Dr., INCZE, Ferenc, Jr., Dr., SITKERI, Ivan, Dr.; Medical University of Endapest, I. Surgical Clinic (Eudapest) Orvostudomanyi Egyetem, I. Sebeszeti Klinika).

"The Use of a New Secretolytic Compound for the Prevention and Treatment of Postoperative Lung Involvements."

Budapest, Orvosi Hetilap, Vol 104, No 17, 28 Apr 63, pages 796-799.

Abstract: [Authors' Hungarian summary modified] The authors call attention to the importance of postoperative lung involvements. Since obstructive atelectasy is often caused by an increased bronchial secretion, the use of secretolytic drugs to facilitate expectoration is important. The surface active wetting agents decrease the viscosity of the mucus. Triton WR 1339 was used in 156 cases by the authors mainly in aerosol form, with very good results. Its use in all fields of surgery is strongly recommended. 2 Hungarian, 39 Western references.

[1/1

CIA-RDP86-00513R001550910008-2"

APPROVED FOR RELEASE: 08/23/2000

BOGDAN, Endre, dr.,; RADNAI, Bela, dr.,; SITKERY, Jozsef, dr.

Diverticulum of the female urethra. Orv. hetil. 96 no.44:1228-1229
30 Oct 55.

1. A Peterfy Sandor utcai Korhaz-rendelo Seveszeti Osztal. (foorvos: Sziklai Andor dr.) kozlem. (URETHRA, diverticula, female urethra)

CHARLES THE SECOND PROPERTY OF THE SECOND SHOWS AND ADDRESS OF THE SECOND SHOWS AND ADDRESS OF THE SECOND SHOWS AND ADDRESS OF THE SECOND SHOWS ADDRESS OF THE SECOND SHOWS ADDRESS OF THE SECOND SHOWS AND ADDRESS OF THE SECOND SHOWS ADDRESS OF THE SECOND SHOWS AND ADDRESS OF THE

SITEMPY, Jozsef, dr.

5-year experience with dispensary treatment of renal tuberculosis.
Tuberkulozis 13 no.4:120-123 Ap '60.

1. Az Urologiai The Gondozo Intexet (vezeto foorvos: Szanto, Miklos, dr.) kozlemenye.

(TUBERCULOSIS RENAL ther.)

BARNA, Laszlo, dr.; LEDER, Jozsef, dr.; SITKERY, Ivan, dr.; POMMERSHEIM, Ferenc, dr.

Postoperative aerosol therapy. Orv.hetil. 102 no.8:357-358 19 F'61.

1. Budapesti Orvostudomanyi Egyetem, I. sz. Sebeszeti Klinika.

(POSTOPERATIVE CARE)

(AEROSOLS ther)

(RESPIRATORY SYSTEM dis)

Packer for investigating absorption beds and injecting hardening muds into permeable beds. Burenie no.3:12-15 64. (MIRA 18:5)

1. Ufimskiy neftyanoy nauchno-issledovatel skiy institut.

Late results of the surgical treatment of a congenital monstrosity of the type of xyphagus parasiticus in a 50-day old infant.

Akush. i gin. 33 no.6:91-94 N-D '57.

1. lz kafedry urologii (zav.-dots. N.Kh.Sitdykov) Kazanskogo instituta usovershenstvovaniya vrachey imani V.I.Lenina.

(MONSTERS, surg.

xyphagus parasiticus, follow-up)

SITDYKOV, N.Kh., dotsent [deceased]; SITDYKOVA, E.N.

Metastatic melanoma of the neck of the bladder. Urologiia no.6:
(MIRA 16:7)
66-67'62.

1. Iz urologicheskoy kliniki (zav. - dotsent N.Kh.Sitdykov)
Kazanskogo instituta usovershenstvovaniya vrachey imeni V.I.
Lenina.
(METASTASIS) (MELANOMA) (BLADDER—CANCER)

PUDOVIK, A.N.; SITDYKOVA, F.N.

Addition of organophosphorus compounds with a mobile hydrogen to divinyl sulfone and p-di = mitrovinyl) tenzene. Zhur. ob. to divinyl sulfone and p-di = mitrovinyl) tenzene. (MIRA 17:7) khim. 34 no. 5:1682-1683 My 164.

1. Kazanskiy gosudarstvennyy universitet.

SITDYKOVA, N.S.; TUROVA, N.Ya.; SEMENENKO, K.N.; NOVOSELOVA, A.V.

Compounds of beryllium chlorides with dialkyl sulfides. Zhur.

(NIRA 14:10)

(Beryllium chloride)

(Sulfide)

TUROVA, N.Ya.; SITDYKOVA, N.S.; NOVOSELOVA, A.V.; SEMENENKO, K.N.

Thermal decomposition of beryllium halide etherates. Zhur.meorg.(MIRA 16:5)

khim. 8 no.2:528-531 F '63.

1. Moskovskiy zosudarstvennyy universitet imeni Lomonosova.

(Beryllium halides) (Ethers)

SLOTVINSKIY-SIDAK, N.P.; FEDOROV, P.I.: AKULKINA, L.M.; LOVETSKAYA, G.A.; SITDYKOVA, N.S.

Production of pure vanadium pentoxide from process solutions.

Zhur. prikl. khim. 36 no.11:2367-2372 N 163.

(MIRA 17:1)

FEDOROV, P.I.; SITDYKOVA, N.S.

Removal of tin and lead impurities from indium by zone melting of its chloride. Dokl. AN SSSR 153 no.1:126-128 (MIRA 17:1) N 163.

l. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova. Predstavleno akademikom I.V. Tananayevym.

SITEK. A.

Affinity of polyamide fibers. F.343. (Textil, Praha, Vol. 9, No. 11, Nov. 1954)

SO: Monthly list of East European Accessions (EEAL), LC Vol 4, No. 6, June 1955, Uncl

Affinity of polynomide fibers. (Conclusion) p. 369. TYTH. (Minister two lehkeho prunyalu) Fruha. Vol. 9, no. 12, Dec. 1954.

3 1823: Lat Duropean Accessions List, Vol. 5, no.), Contember 1956

5171 K.A

CZECHOSLOVAKIA/Chemical Technology - Dyeing and Chemical

H - 34

Processing of Textiles.

Abs Jour

: Ref Zhur - Khimiya, No 12, 1958, 41951

Author

Inst

: Blenching of Polyamide Silone Fiber With Hypochlorous

Sodium NaClO

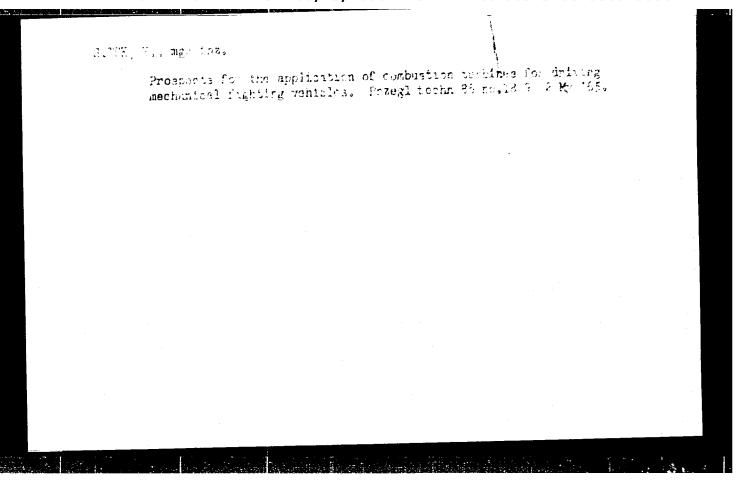
Orig Pub

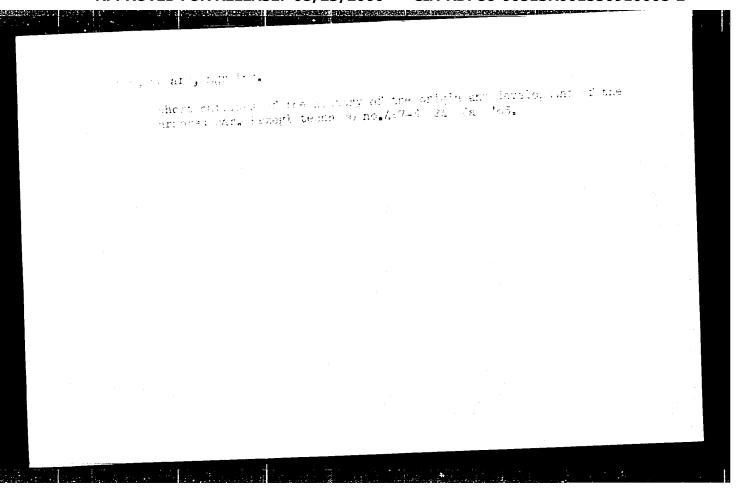
: Textil, 1956, 11, No 8, 241-242

Abstract

A silone is bleached in a bath containing 0.5g. of free chlorine in one liter (pH 8.5) for one hour at 70-80°C. In case the desirable degree of whiteness is not reached the bleaching is continued with special attention given to the content of free chlorine, which should not exceed 0.5g/l. After the material has been bleached it is rinsed carefully and treated for 10 minutes at 60-70°C in a bath containing lg/l of concentrated acetic acid, whereupon lg/l of Na₂S₂O_h (or any other reducer) is added and the material is treated for one hour at 70-80°C,

Card 1/2





SITEK, Edward, mgr inz.

Militarization of industries in western countries. Przegl techn 85 no.
4:6 26 Ja '64.

P/0005/64/000/006/0007/0007

ACCESSION NR: AP4012580

AUTHOR: Sitek, Edward (Master of engineering)

TITLE: Soviet-Made Radiation Maters

SOURCE: Przeglad tachniczny, no. 6, 1964, 7

TOPIC TAGS: Radiation detection, Gamma ray detection, portable radiactivity device

ABSTRACT: In 1963, the book, Zashchita ot Radioaktivnykh Osadkov (Protection from Radioactive Fallout), Petrov, R. V, Pravetskiy, V. N., Stepanov, I. S., and Shalnov, M. I., State Publishing House of Medical Literature, was published in Moscow. We are attempting to present readers of Przeglad Techniczny with excerpts from this work in several installments, to give them description of radiometers produced in the ISSR.

This issue, we are presenting three types of radiometers: The Senezh is designed for detecting and measuring the degree of damage to the surface of objects by radioactivity, both on land and on sea, and to measure the intensity of gamma

Card 1/2.

ACCESSION NR: AP4012580

radiation in the location of a sonde.

The UR-4M radiometer is designed for measuring the intensity of games radiation. It is similar in design to the Senezh.

The RP-1 search radiometer is designed for finding radioactive sources under field conditions, and detects sources of gamma and beta radiation.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 03Mar64

ENCL: 00

SUB CODE: CO, SD

NO REF SOV: 001

OTHER: 002

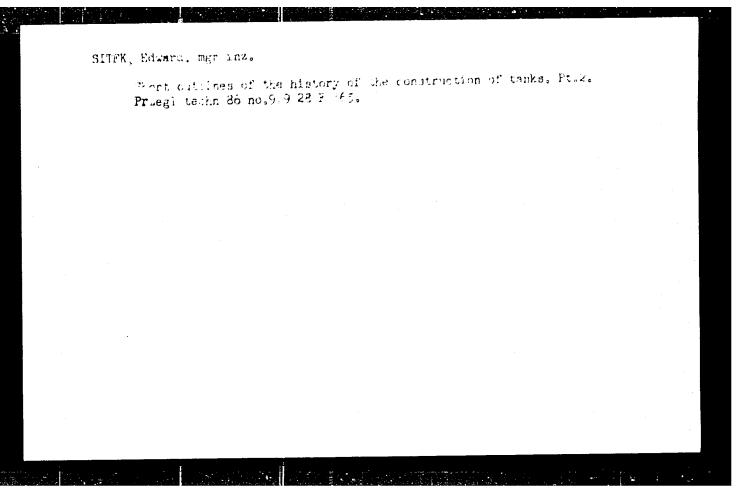
Card 2/2

APPROVED FOR RELEASE: 08/23/2000

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SITEK, Edward, mgr. inz.

Militarization of the industry in Western countries. Przegl techn 85 no.8:7 23 F 164.



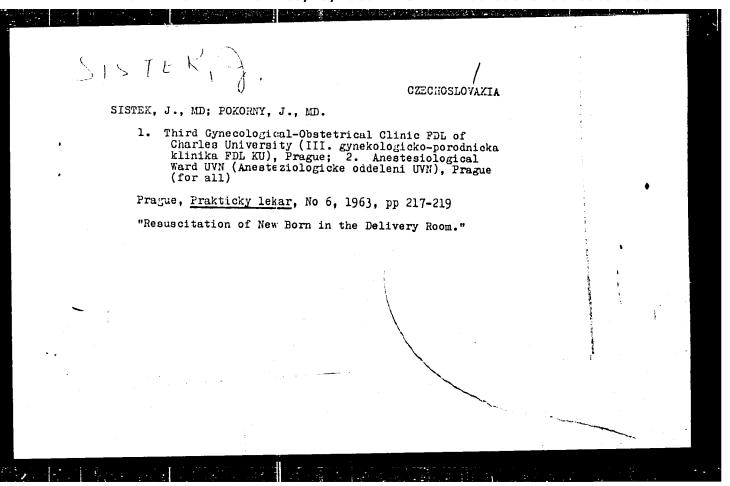
SITEK, Eligiusz, mgr

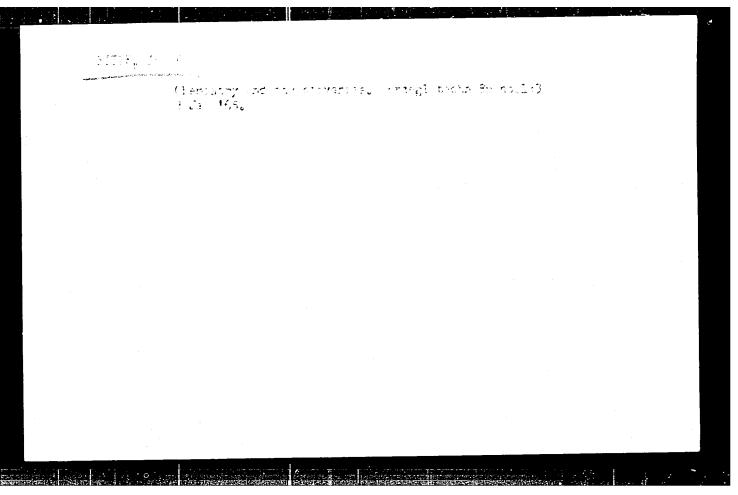
The birth of nautical psychology in Poland. Tech gosp morska 14 no. 4:106-108 Ap 164.

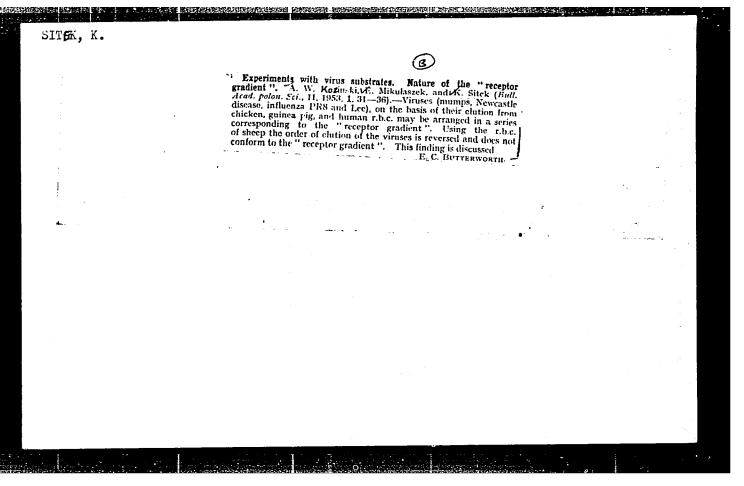
1. Polish Maritime Shipping Company, Laboratory of Sociology and Psychology, Szczecin.

KOSMIDER, J.; SITEK, J.

Rationalization movement during the first half of 1962. Przegl techn no.47:7, ll 25 N '62.







KOZINSKI, A.W.; MIKULASZEK, E.; SITEK, K.

Studies on the receptor gradient. Med. dosw. mikrob. 5 no.4:457-464

(CIML 25:5)

1953.

1. Of the Institute of Medical Microbiology of Warsaw Medical Academy and of the State Institute of Hygiene in Warsaw.

The state of the second second

KURYLOWICZ, Wlodzimierz; KUZNIECOW, Anatol; SITEK, Krystyna

Comparative studies on lyophilized BCG cultures prepared from BCG strains of various origins. Gruzlica 24 no.7:259-268 July 56.

1. Z Panstwowego Zakladu Higieny w Warszawie Miedzynarodowego Osrodka Dziecka w Paryzu. Warszawa, ul. Chocimska 24. (BCG VACCINATION, experimental, comparison of vaccines prep. from various strains (Pol))

STIER EXCERPTA MEDICA Sec 4 Vol. 10/9 Microbiology Sept 57 2247. KUZNIECOW A. and SITEK K. Zakł. Bakteriol. Państwowego Zakł. Hig., Warszawa. * Odczyn hemaglutynacyjny u świnek morskich uodparnianych szczepionką BCG płynną i liofilizowaną porównanie trzech szczepów BCG (Francuski, Duński, Brazylijski). Haemagglutination test in guinea-pigs immunized with fresh BCG vaccine and lyophilized BCG vaccine. Comparison of the three BCG strains: French, Danish and Brazilian GRUŹLICA 1956, 24/9 (925-932) Graphs 1 Tables 1 Investigations were carried out on the accumulation of haemagglutinins for chicken erythrocytes sensitized with tuberculin in guinea-pigs vaccinated either i. c. or s.c. with fresh BCG vaccine and with lyophilized BCG vaccine, prepared from 3 strains; French, Danish, Brazilian. The influence of old tuberculin administered i. c. in guinea-pigs on the increase of haemagglutinin titre was investigated. The findings show that a positive haemagglutination reaction appears in guinea-pigs vaccinated with either fresh or lyophilized BCG vaccine; and with repeated vaccination the titre for chicken erythrocytes sensitized with tuberculin increases; there are no differences between the fresh vaccine and lyophilized vaccine with regard to the development of haemagglutinins. The i.c. administration of vaccine containing 0.2 mg. of bacilli yields the same curve of increment of haemagglutinins as does the s. c. administration of 5 mg. of bacilli. The time of appearance and the curve of increment of haemagglutination titres were the same for the 3 strains used. The Brazilian strain yielded an inconsiderably higher haemagglutination titre than did the other 2 strains. Guinea-pigs given old tuberculin i.c. (even in large doses) did not develop the increment of serum haemagglutinin titre for chicken erythrocytes sensitized with tuberculin. (XV, 4, 17)

MISIEWICZ, Janina i wspolpracownicy: RATYCKI, W.; BURACZEWSKI, O.; GACKOWSKI, J.; GURTAT, B.; KOBIERSKA, H.; KOZAKOW, H.; KRZYSZKOWSKA, A.; KURYIOWICZ, W.; KUZNIECOW, A.; MULLIER, H.; RAFINSKI, T.; ROMANOWSKA, I.; SITEK, K.; STOPNICKA, M.; SZCZEPANAKI, W.; SZUSTROWA, J.; WIERZBOWSKA, M.; WIKTOROWICZ, J.

Early results of vaccination against tuberculosis with vaccines prepared from four different BCG strains. I. Gruzlica 25 no.3:243-250 Mar 57.

KURYLDVICH, V. [Kurylowicz, W].; KUZNETSOV, A.; PASKIYE, I.F.; SITEK, K.

Comparative studies on lyophilized BCG vaccines prepared from BCG strains of various origins. Zhur. mikrobiol. epid. i.immn. 29 no.10: 11.1111 0 58.

l. Iz Gosudarstvennogo instituta gigiyeny v Varshave i eksperimentali nogo otdela Mezhdunarodnogo tsentra pomoshchi detyam v Parishe. (BCG VACCINES

lymphilized vaccines from various strains, comparison (Rus))

SITEK, Krystyna

Studies on a hydrazide resistant mutant of the subspecies "Moreau" of BCG, I, Stability of hydrazide-resistance. Med.dosw.mikrob. 13 no.2:151-158 161.

1. Z Zakladu Bakteriologii PZH w Warszawie.

(MYCOBACTERIUM BOVIS pharmacol) (ISONIAZID phermacol)

SITEK, Krystyna Studies on a hydrazide-resistant mutant of a BCG-Moreau subspecies. II. Immunogenic properties. Med.dosw.mikrob. 13 no.3:271-277 '61.

1. Z Zakladu Bakteriologii PZH w Warszawie.

(MYCOBACTERIUM BOVIS pharmacol) (ISONIAZID pha.rmacol)

POLAND

SITEK, Krystyna, Department of Bacteriology (Zaklad Bakteriologii), PZH [Panstwowy Zaklad Higieny, State Institute of Hygieno] in Warsaw (Director: Prof. Dr. E. WOJCIECHOWSKI)

"Investigation of the ENH-Resistant Mutant of the BCG Substrain Moreau. III. Virulence for Animals and Some Physiological Properties."

Warsaw, Medycyna Doswiadczalna i Mikrobiologia, Vol 15, No 3, 63, pp 207-216

Abstract: [Author's English summary modified] Compared with the original strain BCG Moreau from which it was derived, the INH-resistant mutant was less virulent to laboratory animals (guinea pigs and white mice), possessed no peroxydase activity, showed an increase rather than decrease in catalase activity with time, and showed production of the cord factor on microscopic observation of developed colonies. There are 26 references: 4 Polish, one each Soviet and German, and the others Western.

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APPROVED FOR RELEASE: 08/23/2000

WALECKI, Henryk, and SITEK, Krystyna; Bacteriological Department,
State Institute of Hygiene in Warsaw (head: Prof Dr E. WOJCIECHOWSKI)

"Immunogenic Power of Bordetella Pertussis and Leukocytic Reaction in Mice."

Warsaw, Medycyna Doswiadczalna i Mikrobiologia, Vol 18, No 2, 1966, pp 111-115

Abstract [muthers' Russian and English summaries, modified]: Leukocytic reaction to intravenously injected B. pertussis suspensions, differing in their immunogenic power, was studied in mice. The bacterial suspensions as well as the pertussis endotoxin according to Westphal and soluble surface antigen were found to induce a temporary decrease in the leukocyte count, followed by an increase. The period of leukopenia was different when suspensions were used differing in their immunogenic power; it ranged from 4 to 36 hr. Suspensions with low immunogenic activity induced a short decrease and a subsequent rapid increase in the leukocyte count, neutrrphil leukocytosis being clearly pronounced. Suspensions with high immunogenic activity induced a prolonged leukepenia and a slower increase in the leukocyte count without distinct changes in the leukocyte pattern. The reaction was similar following an injection of soluble surface antigen. The method may be helpful in evaluating the immunogenic power of B. pertussis suspensions. 2 Soviet-bloc and 4 Western refs.

SITEK, Wladyslaw; RAGO, Wlodzimierz; SLUSARCZYK, Boguslaw

Development and modernization of the economic administration units of power engineering in Polish metallurgy for the years 1966-1970. Problemy proj but maszyn 13 no.4:103-109 Ap '65.

1. Biprohut, Gliwice.

KOWALCZYK, Zygmunt; SITEK, Zbigniew

Accuracy testing of the objective of a photocamera. Geodezja AGH no.4:35-45 163.

1. Department of Mining Survey, School of Mining and Metallurgy, Krakow.

SITEK, Zbigniew

Possibilities of using ordinary photocameras for accurate photogrametric works. Geodezja AGH no.4:109-129 '63.

1. Department of Mining Survey, School of Mining and Metallurgy, Krakow.

CHRZAMOWSKI, Adam, mgr., inz.; SITEK, Zbigniew, mgr., inz.

Tests for applying photogrammetric methods for measuring the distribution of air currents in mines. Frzegl gorn 17 no.12: 638-646 161.

KOWALCZYK, Zygmunt, prof.,dr.,inz.; SITEK, Zbigniew, mgr.,inz.

Prototype of a stereometric camera for mining purposes.
Przegl gorn 18 no.1:47-51 '62.

s/035/62/000/011/050/079 A001/A101

AUTHOR:

Sitek, Zbigniew

TITLE:

New methods of direct determination of volumes of soil and rock

masses from ground photographs

PERIODICAL:

Referativnyy zhurnal, Astronomiya i Geodeziya, no. 11, 1962, 14, abstract 11G110 ("Przegl. geod.", 1962, v. 34, no. 4, 133 - 136,

Polish)

The author describes the methods of "horizontal" and "vertical grid" proposed by N. I. Ivanov and B. S. Puzanov (RZhAstr, 1961, 96111). On the basis of employing these methods by the photogrammetry laboratory of the Mining-Metallurgical Academy at Cracow, their high efficiency in comparison with other methods of volume determination is noted. A drawback of the "horizontal grid" method is comparative difficulty of measuring coordinates on a stereocomparator. The necessity is stressed of careful contouring the working on photographs prior to measurements on the stereocomparator. It is also emphasized that the objective of a phototheodolite should be necessarily set in the same position while

Card 1/2

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001550910008-2"

SITEX, Zbigniew, dr. inz.

Photogrammetry in the service of mining surveying in open-pit mines. Przegl. geod. 36 no.2:75-80 F.64.

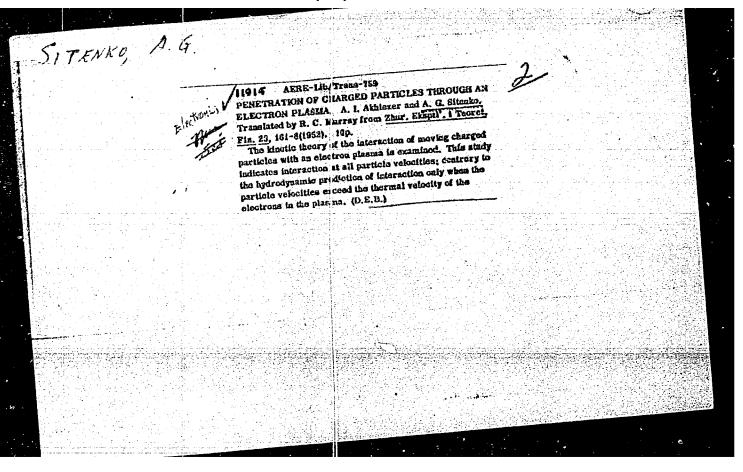
1. Zaklad Fotogrametrii, Akademia Gorniczo-Hutnicza, Krakow.

Effectiveness of health resort treatment in Kislovodsk of

Effectiveness of health resort treatment in Kislovodsk of
hypertension with a varying electrocardiogram character. Uch.
hypertension with a varying electrocardiogram character. Uch.
hypertension (MIRA 15:10)

(HYPERTENSION)
(ELECTROCARDIOGRAPHY)

(KISLOVODSK-HEALTH RESORTS, WATERING PLACES, ETC.)



SiTerKo, A.Q.

USSR/ Nuclear Physics

Card 1/1 Pub. 22 - 14/48

Authors

About the passing of a charged particle through a magnetic substance : Sitenko, A. G.

Title

Abstract

Periodical : Dok. AN SSSR 98/3, 377-380, Sep 21, 1954 The energy losses due to the ionization of the medium and the Cherenkov radiation, which take place during the passing of a charged particle through a magnetic substance, especially when the rate of the particle exceeds the phase rate of electromagnetic wave propagation, are discussed. It was established that the energy losses, due to ionization, do not depend upon the magnetic properties of the substance through which the charged particle passes and that the Cherenkov radiation is actually determined by the electrical and magnetic properties of the substance. Six references: 5-USSR and 1-USA (1935-1952).

Institution:

Presented by:

Academician L. D. Landau, May 26, 1954

SITEA K. SITENKO, A.G.

Charge-field interactions in cavity resonators. Uch.zap. KHGU
(MLRA 10:7)

(H no.6:5-7 '55.
(Electrons) (Electric fields)

AKHIYEZER, A.I.; SITENKO, A.G.

Theory of deuteron fission reactions. Uch.zap. KHGU 64
no.6:9-12 '55.

(MIRA 10:7)

(Deuterons) (Nuclear fission)

SITENKU, A.G

USSR/Nuclear Physics - Penetration of Charged and Neutral Particles Through Matter, C-6

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34096

Author: Sitenko, A. G.

Institution: Khar'kov University, Khar'kov USSR

Title: On the Penetration of a Charged Particle Through a Lossy Dielectric

Original Periodical: Uch. zap. Khar'kevek. un-ta, 1955, 64, 17-22

Abstract: Consideration of the polarization, losses, and the Cherenkov effect when a charged particle moves through a lossy dielectric. The determination of the energy losses reduces to obtaining the field produced by the charge and to calculation of the force acting on the charge. The polarization losses are due to the interaction with the longitudinal portion of the field, occurring in the medium when the particle passes through it, and the radiation losses are due to the transverse part of the field. As a result of the attenuation of the electromagnetic oscillation in the substance, the polarization losses decrease somewhat, while the losses due to Cherenkov radiation increase. With this, the energy due to the polarization losses is absorbed by the matter directly near the trajectory of the particle, and the Cherenkov radiation is absorbed by the matter at considerably greater distances.

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SITENKE, A.G.

USSR/Nuclear Physics - Nuclear Reactions, C-5

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34054

Author: Akhilerer A. I., Sitenko, A. G.

Institution: Kharekov University, Khar kov, USSR

Title: On the Theory of the Nuclear Photoeffect

Original Periodical: Uch. zap. Khar'kevsk. un-ta, 1955, 64, 67-72

Abstract: It is shown that in addition to the process of evaporation of the nucleon from the nucleus and of the photoeffect by an individual nucleon, the photonucleons can also be produced by the following mechanism: the additional nucleon interacts with the surface oscillations of the nucleus, which interact in turn with the electromagnetic wave (interaction of the quadrupole moment of the nucleus with the electromagnetic field of the wave). Using perturbation theory, the authors obtain an tromagnetic field of the cross section of the quadrupole photonuclear effect. approximate expression for the cross section of the quadrupole transition to the cross section of the ratio of the cross section of the quadrupole transition to the cross section of the dipole transition is $\frac{q}{d} = \frac{1}{5} \left(\frac{Z}{A-Z} \right)^2 \left(\frac{w}{w + w_2} \right)^2 \left(\frac{hw}{Mc^2} \right)^2$ A2/3, where hw is the

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USSR/Nuclear Physics - Nuclear Reactions, C-5

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34054

Author: Akhierer, A. I., Sitenko, A. G.

Institution: Kharikov University, Kharikov, USSR

Title: On the Theory of the Nuclear Photoeffect

Original Periodical: Uch. zap. Khar'kovsk. un-ta, 1955, 64, 67-72

Abstract: energy of the incident photon and $\hbar w_2$ is the difference between the nearest levels of the residual nucleus. If $A \sim 100$ and $\hbar w_2 \sim 2-3$ MeV, then at $\hbar w = 17.5$ MeV this ratio will be on the order of 0.1-0.05.

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SITENED, A.G.

USSR/ Physics - Energy losses

Gard 1/2

Pub. 22 -19/60

Authors

Sitenko, A. G., and Kaganov, M. I.

Title

About the energy losses by a charged particle moving in an

anisotropic medium

Pariodical

Dok. AN SSSR 100/4, 681-683, Feb 1, 1955

Abstract

Proof is given of the fact that systematic calculations of the energy losses of a moving charged particle, which moves in an anisotropic medium, lead to a uniform solution; for the simplest anisotropic medium the losses are expressed as follows:

 $-\frac{dE}{dz} = \frac{2nNe^{2}c^{2}}{mv^{2}} \left\{ \ln \frac{mv^{2}\chi_{aq}^{2}}{4\pi e^{2}N} + \ln \frac{E_{\perp}-1}{E_{\perp}(1-\beta^{2})} - \beta^{2} \right\}$

Institution :

Acad. of Scs., USSR. Physico-Technical Institute

Presented by:

Academician L. D. Landau, October 14. 1954

"APPROVED FOR RELEASE: 08/23/2000 CIA-RD

CIA-RDP86-00513R001550910008-2

Periodical : Dok.

Dok. AN SSSR 100/4, 681-683, Feb 1, 1955

Card 2/2

Pub. 22 - 19/60

Abstract

when
$$\beta < \frac{1}{\gamma \epsilon_{\perp}}; -\frac{dE}{dz} = \frac{217Ne^2q^2}{117V^2} \left\{ ln \frac{mv' \kappa_m^2}{4\pi e^2 N} - \frac{1-\beta^2}{\epsilon_{\perp}-1} \right\}$$

when
$$\beta > \frac{1}{\gamma \epsilon_{\perp}}$$

These expressions are identical to those obtained by Fermi with only one variation, in Fermi's \mathcal{E}'_{1} are replaced by \mathcal{E}_{\perp} 5. Five references: 4 USSR and 1 USA (1940-1953).

SITENKO, A. G. and AKHIYEZER, A. I.

"On the Diffractional Disintegration and Scattering of Fast Neutrons by Muclei" and "Note on Muclear Photo Effect" papers presented at the International Conference on Nuclear Reactions, Amsterdam, 2-7 July 1956.

D551274

SITENKO, A.	f.	537.52	2	
	437. ON PLASA A OSCILLATIONS R LECTR C FIELD 1/A.I.Akhiezer and A	[8-13 (1926): m	-1	The state of the s
N.	From the transport equation for the (\vec{r}, \vec{v}, t) is an in the form (\vec{r}, \vec{v}, t) and (\vec{r}, \vec{v}, t)	P/av + J(P) = 0,		
X)	where J = the contains are Fdv - 4sen, E is given by div E - 4se Fdv - 4sen, density) dispersion relations are deduc density) dispersion relations are deduc	n, the average plusma d for the cases of e latter case the		
	authors find $\omega = \Omega + k^3 s^3 / 2\Omega + (8/3\pi)^{1/3}$ and in the former $\Gamma(7) k^3 \sigma^3 + \frac{\Gamma}{2}$	i Eoki / ms,		
	In these formulae Ω = the plasma frequence path, T = the temperature, M and	n are the ion and		
	electron masses respectively, $s = (3T/m)^{1/2}$ and $\sigma = (6m)^{1/2}$ and $\sigma = (6m)^{1/2}$ and $\sigma = (6m)^{1/2}$ the propagation is approximated by an expression age time between collisions.	$M/3m)^{1/4}(e\vec{E}_0i/m)^{1/3}$, ion vector. The collision $1f/\tau$, where τ the aver-H.Motz	and the second of the second o	
	age time act		KILL any	
Physico-Tech	nnical Inst. Acad. Sci. Uk	SSR		
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PA - 1542 CARD 1 / 2

SUBJECT

-Quanta of High Energy on USSR / PHYSICS On the Production of Pion Pairs by SITENKO, A.G.

AUTHOR TITLE

Zurn.eksp.i teor.fis,31,fasc.2,348-350 (1956) Nuclei.

PERIODICAL

The present report takes the influence exercised by COULOMB'S interaction of pions with the nuclear charge upon production in pairs into account. At first the matrix element of the production of a (π, π) -pair is explicitly written down. The wave functions \(\text{and } \text{ and } \text{ are, for the purpose of convenience,} \)

convergent wave. The functions \(\text{and } \text{ are, for the purpose of convenience,} \) subdivided into 3 summands. The formula for the matrix element is simplified because of the vanishing of several integrals (namely the integrals with respect because of the vanishing of several integrals (namely the integrals with respect to the product of the waves entering into Ψ , and Ψ and the integrals containing to the product of the waves entering into Ψ , and Ψ and the integrals containing non-overlapping functions. Next, the matrix element for the case of relativistic necessary functions. Next, the matrix element for the case of relativistic necessary functions. Next, the matrix element for the case of relativistic necessary functions and small angles between \hat{P}_+ , \hat{P}_- and \hat{K} (in which case treatment as diffraction is purposeful) are explicitly written down. The differential cross section of the production in pairs is doj $(E_+, \xi, \eta) = 2\pi |M^2| |F|^2 \mu^4(2\pi)^{-6} d\xi d\eta dE_+$. Here it is true that $q=(\xi + \eta)$ and the form factor F takes the finite dimensions of the particles as well as the form factor F takes the finite dimensions of the particles as well as The differential cross section of the production in pairs is their interaction among themselves into account. This cross section is then explicitly described by the insertion of a simplified expression for M and is

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SITEME, ME

USSR/Nuclear Physics - Nuclear Reactions, C-5

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34088

Author: Rozentsveyg, L. N., Sitenko, A. G.

Institution: Physicotechnical Institute, Academy of Sciences Ukrainian SSR

Title: Splitting of the Relativistic Deuteron in the Electric Field of the Nucleus

Original Periodical: Zh. Eksperim. i Teor. Fiziki, 1956, 30, No 2, 427-428

Abstract: The splitting of a deuteron in the Coulomb field of the nucleus is treated with allowances for the relativistic effect. It is assumed that the interaction process between the neutron and proton are central forces with a zero radius of action, that the electric field of the nucleus terminates at $r = R_0$, equal to the sum of the radii of the nucleus and of the deuteron, and that the radius of the deuteron Rd is small compared with Ro. Using perturbation theory, the authors have found the cross section of the "electric" splitting of the deuteron 51:1 with allowances for their relationships of the "electric" splitting of the deuteron 51:1 "magnetic" their relativistic corrections. It is shown that there occurs also a "magnetic" splitting of the deuteron, at which the n-p system changes from the triplet state into a singlet state. The cross section 6140 of such a transition is found. Numerical integration of the cross section has been carried out and curves are given, giving the dependence of the integral sections on the deuteron energy.

In the extremely relativistic case 61.0 is one order of magnitude smaller than 61.1.

Category: USSR / Radic Physics. deneration and Conversion of Conversion and Conve

Frequency Oscillations

Abs Jour : Ref Zhur - Fizika, No 3, 1957, to 7250

: Sitenko, A.3., Kolomenskiy, A.A.

: Physical-Technical Institute, Academy of Sciences, Ukrainian SSR Author Institut

and Physics Institute imeni P.H. Lebedev, Academy of Sciences,

: Motion of Charged Particles in an Optically Active Anisotropic Title

Orig Pub : Zh. eksperim. i. tecr. fiziki, 1956, 30, No 3, 511-517

Abstract : The author considers the total energy losses (without allowances

for paired collisions) of a charged particle q, moving in an optically-active anisotropic medium, and also clarifies the problem of the distribution of the lesses among the polarization losses and those connected with Chereakov radiation. The determination of the field produced by the charge, and to a calculation of the

force acting on the charge. A general expression is obtained for the total energy losses of a charged particle moving in an arbitrary optically-active anisotropic medium. The general expression

is used to estimate the total lesses in the case of a charged par-

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SITENKO, A.G.

USSR / PHYSICS

PA - 1891

SUBJECT AUTHOR TITLE

PERIODICAL

SITENKO, A.G.

On the Theory of the Stripping Reaction.

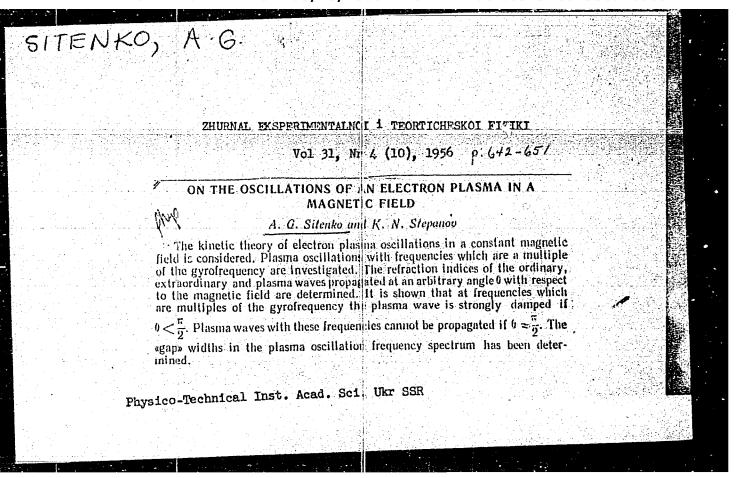
Zurn.eksp.i teor.fis, 31, fasc.4, 636-641 (1956)

CARD 1 / 2

Issued: 1 / 1957

By a method developed by LANDAU and LIFSIC, Zurn.eksp.i teor.fis, 18, 750 (1948) the present paper determines the angular distribution of protons on the occasion of the reaction (d,p) in consideration of the scattering of deuteron- and proton waves in the field on the nucleus. Taking account of scattering leads to a partial polarization of the liberated protons. If the neutrons are captured by the nucleus on to a virtual level, the cross section of the stripping reaction is proportional to the breadth of the level. If the energy of the inciding deuterons is sufficiently high, the total cross section of the stripping reaction is equal to the value found by R.SERBER, The SCHROEDINGER equation for the motion of the system neutron + proton in Phys.Rev. 72, 1008 (1947). the field caused by a nucleus can be written down as follows: $\left\{T_n + T_p + V_n + V_p + V_{np} - E\right\} \psi = 0. \text{ Eere } T_n \text{ and } T_p \text{ denote the operators}$ of the kinetic energy of the neutron and proton respectively, $\mathbf{v}_{\mathbf{n}}$ and $\mathbf{v}_{\mathbf{p}}$ the potentials of the interaction between the neutron or Proton respectively with the nucleus, v_{np} - the potential of the nuclear interaction between a neutron and a proton, E - the total energy of the system. For the solution

Zurn.eKsp.i teor.fis,31,fasc.4,636-641 (1956) CARD 2 / 2 of this equation the required wave function Y is decomposed according to the wave functions of the proton liberated on the occasion of the fission of the deuteron. The solution of the aforementioned SCHROEDINGER equation can be represented as follows: $\Psi(\vec{r}_n, \vec{r}_p) = \sum_{\vec{k}_p} a(\vec{r}_n, \vec{k}_p) \Psi_{\vec{k}_p} (\vec{r}_p)$. Here $a(\vec{r}_n, \vec{k}_p)$ denotes certain functions of the coordinates of the neutrons and of the wave vectors of the emitted particle. An exact equation for the determination of a is given, and a is developed according to spherical harmonics. A general formula for the cross section of the stripping reaction (d,p) is then derived. On this occasion at first an expression for the neutron flux passing through the surface of the nucleus is given. Taking the scattering of deuteronand proton waves into account leads to a partial polarization of the liberated protons. Far from resonance, the deuterom and the proton undergo nearly complete reflection on the boundary of the nucleus, and therefore the scattering of the waves by the nucleus may approximatively be considered to be the scattering by an impenetrable sphere of the radius R. Hear resonance energy resonance scattering plays the most important part. However, near resonance the process (d,p) with production of a compound nucleus probably plays an essential part. Interference between these two processes probably causes a marked modification of the angular distribution of the products of reaction. In conclusion the case with a high energy of the inciding deuterons is studied. INSTITUTION: Physical-Technical Institute of the Academy of Science of the Ukrainian SSR.



·SITE NKO, A.G

USSR/Nuclear Physics - Nuclear Reactions, C-5

Abst Journal: Referst Zhur - Fizika, No 12, 1956, 34089

Author: Akhimazer, A. I., Sitenko, A. G.

. Institution: Physicotechnical Institute, Academy of Sciences Ukrainian SSR, Khar'kov University, Khar'kov, USSR

Title: On the Diffraction Scattering of Fast Deuterons by Nuclei

Original Periodical: Dokl. AN SSSR, 1956, 107, No 3, 385-388

Abstract: Diffraction scattering in the case of point particles can be investigated by an optical method, based on the Huygens principle. The authors have considered the diffraction scattering of complicated particles (deuterons) by absolutely black nuclei. The necessary generalization of the usual optical method was indicated by L. D. Landau. In the case of heavy absolutely-black nuclei without allowances for the Coulomb interaction, the cross section of the elastic scattering is $\sigma_1 = \pi R^2 + 1/3\pi(1-\ln 2)RR_d$, $R_d \ll R$, where R and R_d are the radii of the nucleus and of the deuteron. The second component represents a correction caused by the finite dimensions of the deuteron. In addition to the elastic scattering, the following reactions are possible: the stripping of the proton with absorption of the neutron, simultaneous

1 of 3.

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USSE/Nuclear Physics - Nuclear Reactions, 0-5

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34089

Author: Akhiezer, A. I., Sitenko, A. G.

Institution: Physicotechnical Institute, Academy of Sciences Ukrainian SSR, Khar'kov

University, Khar'kov, USSR

Title: On the Diffraction Scattering of Fast Deuterons by Nuclei

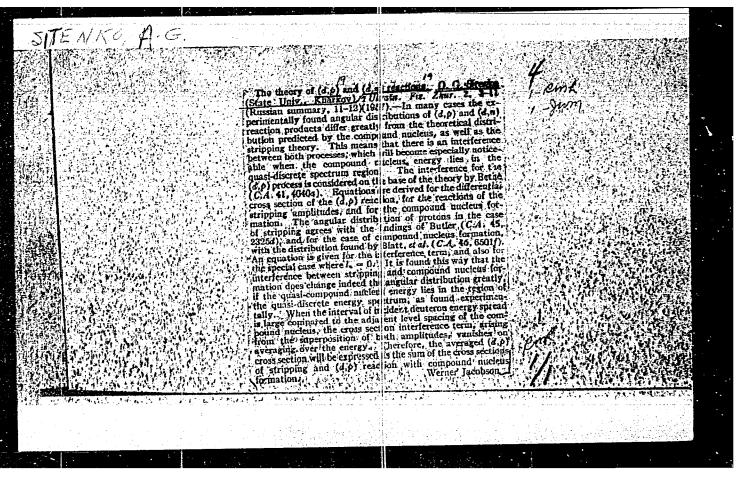
Original Periodical: Dokl. AN SSSR, 1956, 107, No 3, 385-388

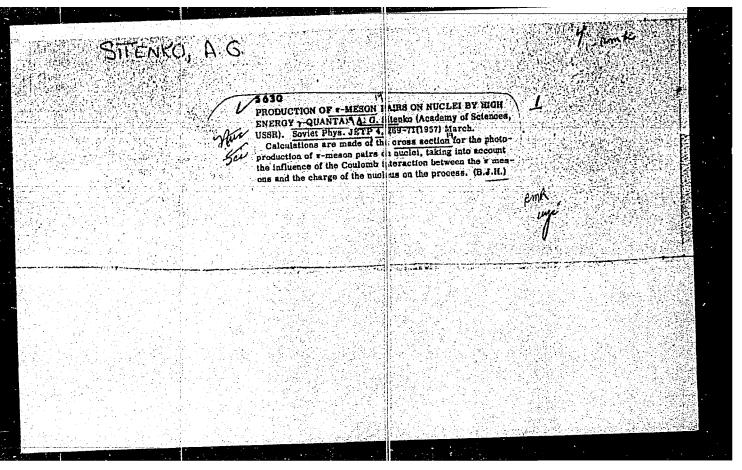
Abstract: absorption of neutron and proton, and in addition, the diffraction splitting of the deuteron, in which both particles are liberated. The deuteron is a weakly coupled system; if the change in the momentum of the deuteron during the elastic scattering exceeds the momentum of the relative motion of the neutron and proton in bound state, the deuteron may split in a location remote from the nucleus. The cross section of such a diffraction splitting of the deuteron in the limiting case $R_d \ll R$ is $\sigma_f = 1/3\pi(\ln 2 + 1/2)RR_d$. Along with the stripping reaction, the diffraction splitting of the deuteron leads to the liberation of a neutron and a proton, i.e., the yield of neutrons created during interaction of fast deuterons with nuclei is increased. In the limiting case $R_A \ll R$ the total cross section of all the

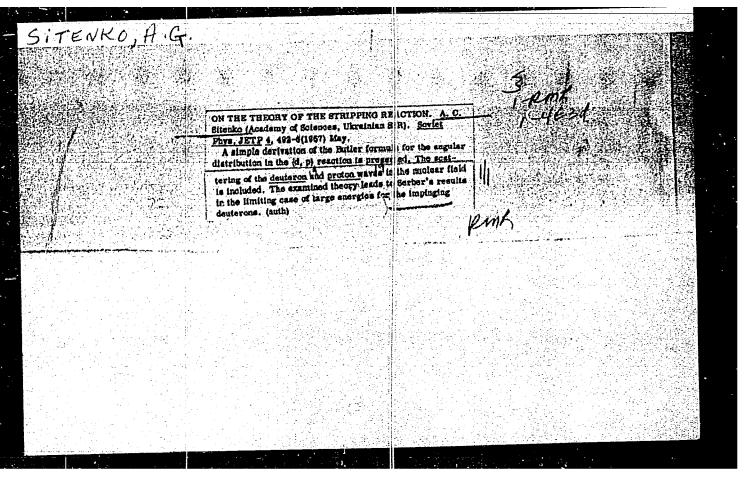
processes, both elastic and inelastic, which is determined by the amplitude of the elastic scattering by a zero angle, is $\delta_t = 2\pi R^2 + \pi R R_d$. It is shown that the sum of the cross sections of the elastic scattering and the diffraction splitting of the deuteron amounts to 1/2 the total cross section. The share of the remaining processes (reaction of stripping of the neutron and proton and the absorption of both particles by the nucleon) is also $1/2\delta_t$.

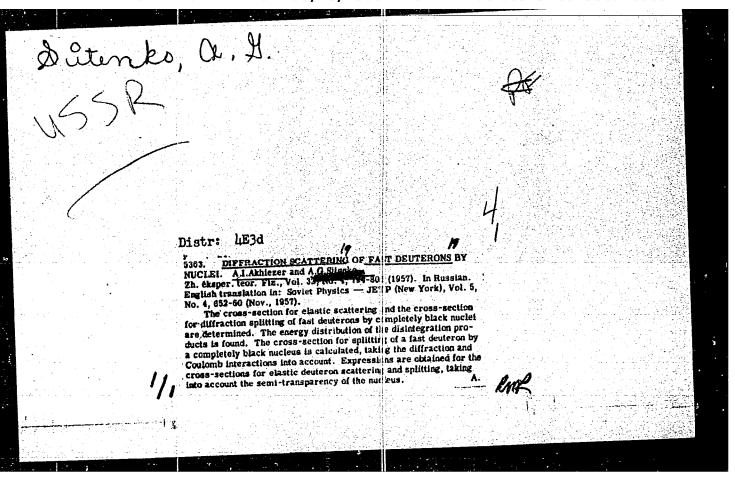
292

SHENKO O. G	Emission of requents from the colpions with nuclei. O. G. Siteniro Univ., Kharkov). Doklady Akad. 1119-22; Soviet-Phys. "Doklady Akad. iish translation).—A math. treatment of the diffraction emission of requal pions with nuclei, by taking into account of the pions with the charge of the Distr: 4E3d	sion of fast, charged A. M. Gor'kii State Name S.S.A. 109. 512-16(1956)(Eng- is given for the case ha in the collision of nt the Coulomb reac- nucleus. J. Roving Leach	
		6 mp	









SITENKO, A

AUTHOR:

SITEMKO, A.G.

89-10-10/36

TITLE:

Deuteron Dissociation on Nuclear Scattering (O rassucheptenii

deytronov pri rasseyanii na yadrakh)

Atomnaya Energiya, 1957, Vol 3, Nr 10, pp 324-325 (USSR)

PERIODICAL: ABSTRACT:

The differential angular- and energy distribution of neutrons and protons which are liberated with the fission of the deuteron are theoretically derived according to formula. An integration of this equation is, however, not possible for the general case. If $f_{\rm eff} \ll \lambda$ is true, three other equations for the momentum

distribution of the neutrons and protons are given.

SUBMITTED:

June 6, 1957

AVAILABLE:

Library of Congress

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CIA-RDP86-00513R001550910008-2 "APPROVED FOR RELEASE: 08/23/2000

AUTHOR

PA - 2697

TITLE

The Diffraction Production of Proton-Antiproton Pairs by Photons

(Diffraktsionmoye obrazovaniye par proton_antiproton fotonami

Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol 32, Nr 2,

PERIODICAL

pp 383-383 (U.S.S.R.)

Received 5/1957

Reviewed 6/1957

ABSTRCT

The production of a proton antiproton pair can be regarded as a process of first order. The matrix element of this process is given in the paper under review. The consideration is greatly simplified in the boundary case \approx \gamma2Min which only the behavior of the wave functions distant from the nucleus is of importance. The wave functions form there the superposition of a plane wave and of the wave diffracted by the nucleus. Adenotes the energy of the photons, and M the mass of the protons. The paper under review gives the formula for the state of the proton with negative energy, this formula resulting from the theory of the scattering of particles with spin 1/2 by an absolutely black absorbing nucleus with the radius R. A formula is also given for the wave function of the proton in the field of the nucleus. The formula for the production cross section of a proton antiproton pair by a black uncharged nucleus, derived for small angles between, on the one hand, the impulses p, p of the produced particles and, on the other hand, the impulse k of the photon under the premise E M,

Card 1/2

The Diffraction Production of Proton-Antiproton Pairs by PA -2697 Photons of High Energy.

E)M, is also given explicitly. Unlike the formulae obtained in the Born approximation, we do not obtain the just mentioned expression for the production cross section from the corresponding expression for the continuous radiation of a proton at the diffraction scattering by a black nontransparent nucleus. This can be explained by the fact that in the extremely relativistic case the diffracted waves at continuous radiation do virtually not overlap, whereas they overlap strongly at pair production. If we take into consideration the dimensions of the nucleons, we obtain a certain form factor in the expression mentioned last for the cross section of production of a proton—antiproton pair. The anomalous magnetical moment of the nucleon was not taken into account by the authors of the paper under review. (No reproductions).

ASSOCIATION

Physical-Technological Institute, Academy of Sciences of the Ukrainian

SSR.

PRESENTED BY

SUBMITTED 15.10.1956.

AVAILABLE

Library of Congress

Card 2/2

SITENKUDAG

56-1:-20/52

AUTHOR

AKHTYEZER, A.I., SITENKO, A.G.
On the Diffrection Scattering of Fast Deuterons By Nuclei
(O'diffraktsiomom rasseyanii bystrykh deytonov yacrami. Russian)
(O'diffraktsiomom rasseyanii bystrykh deytonov yacrami. Russian)
Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol 32, Ar 4, pp 794 - 805

ABSTRACT

PERIODICAL

The paper under review determines the cross sections of the elastic scattering and of the diffraction spallation of fast deuterons by absolutely black nuclei. It also determines the energy distribution of the spallation products. It is possible to determine the diffraction scattering of punctiform by absorbing nuclei with the aid of the optical method using the Huygens principle. In order to generalize this method for deuterons, the authors of the paper under review first of all investigate the problem of the diffraction scattering of punctiform particles by absorbing nuclei. This method of investigation permits to make the generalization for the case of the diffraction scattering of composed particles with weak coupling, e.g. of deuterons by absolutely black nuclei. In this context it is necessary to take into account the motion of the centers of mass of the deuterons as well as the relative motions of the meutron and of the proton in the deuteron. The paper under review proceeds to derive expressions for the differential and for the integral cross section of the elastic scattering and of the diffraction spallation, and also an expression for the inte-

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On the Diffraction Scattering of Fast Deuterons By Nuclei -90.4-20/52 gral cross section of the spallation. Furthermore, also reactions of the tearing-off of a neutron cr of a proton as well as the absorption of both particles by a nucleus are possible, — the relevant cross sections are listed in the paper under review and discussed. Then the paper shows how the Coulomb's interaction is taken into account, — the auper shows how the Coulomb's interaction of fast deuterons by taking interaction of the Coulomb's interaction. For the total cross section of the spallation of $\frac{1}{2}$ ($\frac{1}{2}$ ($\frac{1}{2}$), $\frac{1}{2}$ $\frac{1}{2}$ is obtained. (No reproduction).

ASSOCIATION

Physical-Technological Institute, Academy of Sciences of the Ukrainian

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56-6-30/56

On the Bremsstrahlung of Ultra-Relativistic Particles in a Central Field.

The author then studies the scattering of a particle with spin 1/2 at which a y-quantum is emitted. The differential cross section for the emission of a y-quantum by an ultrarelativistic particle with spin 1/2 in a central symmetric field is computed. Next, a general expression for the ratio (cross section of elastic scattering / cross section of Bremsstrahlung) is determined.

ASSOCIATION:

State University Khar'kov (Khar'kovskiy gosudarstvennyy

universitet, Russian)

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56-4-31/54

AUTHORS:

Akhiyezer, A.I., Sitenko, A.G.,

TITLE:

On the Theory of Evaporation Reactions at High Energies (K teorii reaktsii sryva pri vysokikh energiyakh)

PERIODICAL:

Zhurnal Eksperia. i Teoret. Fiziki, 1957, Vol. 33, Nr 4, pp. 1040 - 1042 (USSR) (Letter to the Editor)

ABSTRACT:

The effective cross section of anevaporation is theoretically dervied, when the generally made assumption $R \gg R_d$ is not valid. (R = the radius of the nucleus to be split, R_d = the radius of the deuteron). The reaction is treated in which a neutron becomes free and a proton is absorbed. The total effec-

neutron becomes tree and a proton is absorbed. The total effective cross section for the evaporation reaction is determined to tive cross section for the evaporation reaction is determined to $O_n = \pi R^2 \left\{ 1 - 2 \int_{\overline{k}}^{p} - \operatorname{arc} \operatorname{tg} \left\{ p - \frac{1}{k} \right\} \right\},$ whereas the following was found for the absorption of a deutonor:

on: $\sigma_{a} = 2 \pi R^{2} \int_{\xi}^{\infty} \frac{p}{\xi} - \operatorname{arc} \operatorname{tg} \frac{\xi}{p} \cdot \frac{J^{2}_{1}(\xi)}{\xi} d\xi.$ teron:

Carrie

Khar kov State Univ. Physico-Jack Inal AS UK SER

